

25X1

Declassification Review by NGA

R 181511Z JUL 68
FM NPIC WASHDC
TO RUEOJFA/DIA (DIAXX-2)
RUEOJFA/JCS (JRC)
RUEFHQA/HQ USAF FOR AFNICAD & AFRDRP
RUCSAAA/SAC (DIR)
RUWMDDA/9 SRW (DCI)
BT

OUT 65579

18 JUL 68 16 14z

S E C R E T [] CITE NPIC 4227.
SUBJ: EVALUATION OF GIANT SCALE MISSION S-032, FLOWN ON 25 JUNE 1968.

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1. QUALITY SUMMARY: THIS MISSION PROVIDES IMAGERY WHICH IS COMPARABLE TO GIANT SCALE MISSION S-029. THE BEST IMAGERY IS LOCATED IN THE EARLIER PORTION OF THE MISSION OVER SOUTH VIETNAM AT AN ALTITUDE OF 75,000 FEET. THE IMAGERY IS DEGRADED IN BOTH TECHNICAL OBJECTIVE CAMERAS AFTER THE CAMERA OFF/ON ASSOCIATED WITH THE REFUELING FUNCTION. INTERPRETATION SUITABILITY AT THE BEGINNING OF THE MISSION IS CONSIDERED GOOD WHERE CLOUDS ARE NOT A FACTOR. FOR THE REMAINDER OF THE MISSION, PI SUITABILITY IS CONSIDERED POOR TO

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FAIR IN CLOUD FREE AREAS. GROUND RESOLUTION FIGURES ARE EMPIRICAL ESTIMATES BASED ON EVALUATIONS OF SIMILAR SENSORS AND IMPLY A BAR AND A SPACE. A FIGURE OF [] OBJECT COULD BE DETECTED. THE FOLLOWING RESOLUTION ESTIMATES WERE MADE ON THE ORIGINAL NEGATIVE FROM CLOUD FREE IMAGERY AT OR NEAR NADIR AND WHERE THE VEHICLE IS AT AN ALTITUDE OVER 70,000 FEET.

- LEFT TECHNICAL OBJECTIVE CAMERA (AFTER REFUELING SHUT DOWN)
- RIGHT TECHNICAL OBJECTIVE CAMERA (AFTER REFUELING SHUT DOWN)
- LEFT OPERATIONAL OBJECTIVE CAMERA
- RIGHT OPERATIONAL OBJECTIVE CAMERA

2. CLOUDS OBSCURE OR DEGRADE 50 PERCENT OF THE MISSION. MOST OF THE CLOUD FREE PHOTOGRAPHY WAS OVER WATER.

3. THE MATERIAL WAS PROCESSED AT YOKOTA [] THE MISSION EMPLOYED THE USUAL SENSORS. THE ONLY MATERIALS EVALUATED ARE THE ORIGINAL NEGATIVES FROM THE OPERATIONAL AND TECHNICAL OBJECTIVE CAMERAS. THE TERRAIN OBJECTIVE CAMERA MATERIAL WAS USED TO DETERMINE THE AREAS OF 80 PERCENT CLOUD FREE PHOTOGRAPHY.

4. ANALYSIS OF THE TECHNICAL OBJECTIVE MATERIAL.

DISTRIBUTION	
FILE	
FILE SEC.	
REFB/RD	
SECUR.	
STSSG/TAD	
PSG/OC	
RRD	
REPRO	25X1
AID	
IEG	
PROD	25X1
SCIE	
WEST	
EAST	
M&S	25X1
PGM	
IAS	
DIA-2A4	
SPAD	
DIA-2A	
	25X1
	25X1

APPROVED BY
SIGNED
WITH DATE

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A. COMMENTS APPLICABLE TO BOTH CAMERAS.

(1) APPROXIMATELY 25 PERCENT OF THE PHOTOGRAPHY WAS ACQUIRED ABOVE 30 DEGREES OBLIQUITY.

(2) MINUS DENSITY STREAKS ASSOCIATED WITH THE PLATEN CONFIGURATION AND RANDOM MINUS DENSITY STREAKS PARALLEL TO THE MAJOR AXIS OF THE FILM ARE PRESENT THROUGHOUT THE MISSION.

(3) A PLUS DENSITY STREAK PARALLEL TO THE MAJOR AXIS, 2.0 INCHES FROM THE TITLED EDGE IS PRESENT THROUGHOUT THE MISSION.

(4) FOG, CAUSED BY STATIC DISCHARGE, CAN BE DETECTED ALONG BOTH EDGES OF THE NEGATIVE.

(5) BANDING IS PRESENT THROUGHOUT THE MISSION.

GROUP 1
Excluded from automatic
downgrading and
declassification

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(6) THE DENSITY AND CONTRAST ARE ADEQUATE WHERE CLOUDS AND HAZE ARE NOT A MAJOR FACTOR.

B. LEFT TECHNICAL OBJECTIVE CAMERA (AL) S/N 64-21.

(1) PLUS DENSITY MARKS AND WAVERING PLUS DENSITY LINES ARE PRESENT INTERMITTENTLY BETWEEN FRAMES 265 AND 353.

(2) A PLUS DENSITY STREAK PARALLEL TO THE MAJOR AXIS, 2.0 INCHES FROM THE UNTITLED EDGE IS PRESENT THROUGHOUT THE MISSION.

(3) BANDING IS MORE APPARENT IN FRAMES WHERE SHUTTER

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MOVEMENT IS TOWARD THE SUPPLY END OF THE FILM.

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(4) CAMERA OFF/ONS OCCUR BETWEEN FRAMES 182/183 AND 210/211.

(5) THE IMAGERY AFTER FRAME 211 IS SEVERELY DEGRADED WITH SMEAR AND DOUBLE IMAGERY. SIMILAR COVERAGE BY THE AR (FRAME 364) AND AL (FRAME 299) WERE COMPARED TO REACH THIS CONCLUSION. THE CAUSE IS UNDETERMINED.

(6) FRAMES 472-479 ARE DEGRADED BY SCRATCHES, FOG AND WATER MARKS.

(7) THERE IS A BIAS OF 56 BETWEEN THE EVENTS COUNTER AND THE FRAME NUMBER.

(8) THE LAST TITLED FRAME IS 479.

C. RIGHT TECHNICAL OBJECTIVE CAMERA (AR) S/N 64-08

(1) FOG AREAS ARE PRESENT INTERMITTENTLY IN FRAMES 300-502. THEY ARE RANDOMLY SPACED ALONG A LINE 1.25 INCHES FROM THE TITLED EDGE.

(2) PLUS DENSITY DOTS 0.75 INCH FROM THE TITLED EDGE, 1.5 INCHES APART, ARE PRESENT IN FRAMES 273-502.

(3) CAMERA OFF/ONS OCCUR BETWEEN FRAMES 229/230 AND 272/273. FORMAT OVERLAP ASSOCIATED WITH CAMERA OFF/ONS OCCURRED

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BETWEEN FRAMES 273 THROUGH 275.

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(4) THERE IS A BIAS OF 59 BETWEEN THE EVENTS COUNTER AND THE FRAME NUMBER.

(5) THE LAST TITLED FRAME IS 502.

5. ANALYSIS OF THE OPERATIONAL OBJECTIVE CAMERA MATERIAL.

A. COMMENTS APPLICABLE TO BOTH CAMERAS.

(1) THE DENSITY AND CONTRAST ARE MEDIUM AND APPEAR TO BE SATISFACTORY.

(2) DATA BLOCK APPEARS SLIGHTLY SKEWED. THE RIGHT HAND SIDE OF THE CLOCK IS DIFFICULT TO READ.

(3) MINUS DENSITY STREAKS ARE PRESENT ALONG THE MAJOR AXIS OF THE FILM THROUGHOUT THE MISSION.

(4) RAIL SCRATCHES ARE PRESENT THROUGHOUT THE MISSION.

(5) SLIGHT TITLING TRANSFER OCCURRED INTERMITTENTLY THROUGHOUT THE MISSION.

B. LEFT OPERATIONAL OBJECTIVE CAMERA (CL) S/N 4005.

(1) THE FIRST 0.6 INCH OF SCAN IS DEGRADED AND APPEARS OUT OF FOCUS. THE FIRST 0.3 INCH OF THIS IS MOST SEVERE.

(2) THE TIMING DOTS IMAGED WITH EACH FRAME BEGIN 0.5 INCH AFTER THE START OF SCAN AND EXTEND 0.8 INCH BEYOND THE END OF SCAN.

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(3) FOG AREAS ARE PRESENT IN FRAMES 87 AND 89 NEAR THE TITLED EDGE OF THE FORMAT.

(4) FRAMES 340/341 AND 680/681 CONTAIN SPLICES BETWEEN THEM.

(5) THERE IS A BIAS OF SIX BETWEEN THE EVENTS COUNTER AND THE TITLED FRAME NUMBER.

(6) THE LAST TITLED FRAME IS 865.

C. RIGHT OPERATIONAL OBJECTIVE CAMERA (CR) S/N 4016.

(1) THE FIRST 0.55 INCH OF SCAN IS DEGRADED AND APPEARS TO BE OUT OF FOCUS. THE FIRST 0.35 INCH OF THE DEGRADED AREA IS MOST SEVERE.

(2) THE TIMING DOTS IMAGED WITH EACH FRAME BEGIN 0.65 INCH AFTER THE START OF SCAN AND EXTEND 0.8 INCH BEYOND THE END OF SCAN.

(3) THE FIRST FRAME CONTAINS AN OUT OF FOCUS AREA 8.6 INCHES FROM THE START OF SCAN. THIS AREA IS APPROXIMATELY 0.7 INCHES WIDE ACROSS THE FORMAT (TITLED EDGE TO UNTITLED EDGE) WITH A HAIRLINE SCRATCH RUNNING THROUGH IT ACROSS THE FORMAT.

(4) HANDLING MARKS DEGRADE FRAMES 9 AND 11.

(5) FRAMES 340/341, 552/553 AND 680/681 HAVE SPLICES

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BETWEEN THEM. THE DATA BLOCK FOR FRAME 680 HAS BEEN REMOVED.

(6) THERE IS A BIAS OF FIVE BETWEEN THE EVENTS COUNTER AND THE TITLED FRAME NUMBER.

(7) THE LAST TITLED FRAME IS 889.

GP-1

S E C R E T [REDACTED]

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END OF MESSAGE